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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,367	12/27/2001	Fabio R. Maino	ANDIP004	8712

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EXAMINER	
TESLOVICH, TAMARA	
ART UNIT	**PAPER NUMBER**
2137	

DATE MAILED: 05/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/034,367	MAINO ET AL.	
	Examiner	Art Unit	
	Tamara Teslovich	2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 March 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *26-50* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *26-50* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This action is in response to the Applicant's Remarks and Amendments filed March 14, 2006.

Claims 26-50 are pending and herein considered.

Response to Arguments

Applicant's arguments filed March 14, 2006 have been fully considered but they are not persuasive.

In response to the Applicant's arguments on pages 7-8 concerning Hagerman's alleged failure to disclose the security control indicator of independent claims 26 and 50, and newly amended independent claims 38 and 46, the Examiner respectfully disagrees. Although it is the Applicant's contention that the authentication code field cited by the Examiner fails to disclose a 'security control indicator', lines 15-41 of column 5 suggest otherwise. Within these sections, Hagerman discloses the use of the authentication code field to hold not only a hash function of at least a key value but also transmitted time fields, S_ID fields, D_ID fields, and any other associated field header, all of which are utilized to enhance the security of the packet.

In response to the Applicant's arguments on page 8 concerning Hagerman's alleged failure to disclose 'decrypting the first portion of the frame by using algorithm information contained in the entry in the security database' and 'means to decrypt the eventually encrypted frame' of claims 26 and 50 respectively, the Examiner respectfully

disagrees. Those sections initially cited by the Examiner concerning hashing operations and the authentications performed thereupon support the Examiner's previous rejections, finding additional support in lines 27-34 of column 7 wherein Hagerman discloses decrypting the encrypted portions of the frames.

In view of the arguments previous, Examiner respectfully disagrees with the Applicant's argument that Hagerman fails to disclose claims 26-50 in their entirety, and maintains the previously presented 35 U.S.C. 102(e) rejections repeated below and amended in accordance with Applicant's amendments.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 26-50 remain rejected under 35 U.S.C. 102(e) as being anticipated by Hagerman (US Patent No. 6,973,568 B2).

As per claim 26, Hagerman teaches a method for processing frames in a fibre channel network having a first network entity and a second network entity (col.4 lines 23-31), the method comprising: receiving a frame at a first network entity from the

second network entity in a fibre channel network (col.3 lines 43-53); identifying a security control indicator in the frame from the second network entity (col.3 lines 23-24; col.5 lines 15-28); determining that a security association identifier associated with the frame corresponds to an entry in a security database (col.3 lines 48-53); decrypting the first portion of the frame by using algorithm information contained in the entry in the security database (col.3 lines 43-47).

As per claim 27, Hagerman teaches wherein the entry in the security database was created after a fibre channel network authentication sequence between the first and second network entities (col.7 lines 1-10).

As per claim 28, Hagerman teaches wherein the first portion is decrypted using a key contained in the entry in the security database (col.3 lines 43-53).

As per claim 29, Hagerman teaches wherein the first portion is encrypted using DES, 3DES or AES (col.7 lines 1-10).

As per claim 30, Hagerman teaches recognizing that a second portion of the frame supports authentication; using algorithm information contained in the entry in the security database to authenticate the second portion of the frame (col.5 lines 15-41).

As per claim 31, Hagerman teaches wherein the second portion is authenticated using MD5 or SHA1 (col.3 lines 34-42; col.7 lines 35-44).

As per claim 32, Hagerman teaches wherein the authentication sequence is a fibre channel login sequence between the first and second network entities (col.3 lines 34-47).

As per claim 33, Hagerman teaches wherein the login sequence is a PLOGI or FLOGI sequence (col.6 lines 6-13).

As per claim 34, Hagerman teaches wherein the first and second network entities are domain controllers and the authentication sequence is a FC-CT sequence (col.1 lines 28-40).

As per claim 35, Hagerman teaches wherein the first and second network entities are domain controllers and the authentication sequence is a SW-TL sequence (col.6 lines 6-14).

As per claim 36, Hagerman teaches a method for transmitting encrypted frames in a fibre channel network having a first network entity and a second network entity (col.4 lines 23-31), the method comprising: identifying a fibre channel frame having a source corresponding to the first network entity and a destination corresponding to the second network entity (col.3 lines 43-53; col.4 lines 36-51); determining if the fibre channel frame corresponds to the selectors of an entry in a security database; encrypting a first portion of the fibre channel frame using key and algorithm information associated with the entry in the security database (col.3 lines 48-53); providing a security control indicator in the fibre channel frame, wherein the security control indicator specifies that the fibre channel frame is encrypted; transmitting the fibre channel frame to the second network entity (col.7 lines 26-34).

As per claim 37, Hagerman teaches wherein the entry in the security database was created after a fibre channel network authentication sequence between the first and second network entities (col.7 lines 1-10).

As per claim 38, Hagerman teaches wherein the payload is encapsulated using the Authentication Header protocol or the Encapsulating Security Payload protocol (col.7 lines 1-10).

As per claim 39, Hagerman teaches adding security information to the header of the fibre channel frame (col.3 lines 23-33).

As per claim 40, Hagerman teaches wherein a first portion of the fibre channel frame is encrypted using DES, 3DES, or AES (col.7 lines 1-10).

As per claim 41, Hagerman teaches wherein parameters in the header are normalized prior to encrypting the first portion of the fibre channel frame (col.3 lines 48-53).

As per claim 42, Hagerman teaches wherein the payload is padded prior to encrypting the first portion of the fibre channel frame (col.5 lines 3-25).

As per claim 43, Hagerman teaches computing authentication data using key and algorithm information as well as a second portion of the fibre channel frame (col.5 lines 15-25).

As per claim 44, Hagerman teaches wherein authentication data is computed using MD5 or SHA1 (col.3 lines 34-42; col.7 lines 35-44).

As per claim 45, Hagerman teaches wherein the authentication sequence is a fibre channel login sequence between the first and second network entities (col.3 lines 34-47).

As per claim 46, Hagerman teaches wherein the login sequence is a PLOGI or FLOGI sequence (col.6 lines 6-13).

As per claim 47, Hagerman teaches wherein the first and second network entities are domain controllers and the authentication sequence is a FC-CT sequence or an SW-ILS message (col.1 lines 28-40; col.6 lines 6-14).

Claims 48-49 correspond to an apparatus employing the method described in claims 36-37 and are rejected accordingly.

As per claim 50, Hagerman teaches an apparatus for receiving encrypted frames in a fibre channel network having a first network entity and a second network entity (col.4 lines 23-31), the apparatus comprising: means for identifying that the frame has been secured (col.3 lines 23-24; col.5 lines 15-28); means to lookup the security parameters in a security database that allow the de-encapsulation of the frame (col.3 lines 48-53); means to decrypt the eventually encrypted frame (col.3 lines 43-47); means to verify that the message has been sent by the sender, and that has not been tampered with during its transmission (col.3 lines 59-62)

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamara Teslovich whose telephone number is (571) 272-4241. The examiner can normally be reached on Mon-Fri 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TT 05.29.06

EMMANUEL L. MOISE
SUPERVISORY PATENT EXAMINER